

Jeopardy Assessment
for the Proposed Incidental Taking Permit
of the Blanding's Turtle, Ornate Box Turtle, and Northern Cricket Frog
Natural Resources Conservation Service (NRCS) – Avon Bottoms Restoration Project
Rock County, Wisconsin

Background

The Natural Resources Conservation Service (NRCS) is proposing a restoration project in Rock County near Avon Bottoms SWA. The project includes seven properties (landowners) and has the potential to impact the Blanding's turtle (*Emydoidea blandingii*), ornate box turtle (*Terrapene ornata*), and northern cricket frog (*Acris crepitans*).

The Blanding's turtle is listed as a threatened species in Wisconsin. They utilize a wide variety of aquatic habitats including deep and shallow marshes, shallow bays of lakes and impoundments where areas of dense emergent and submergent vegetation exists, sluggish streams, oxbows and other backwaters of rivers, drainage ditches (usually where wetlands have been drained), and sedge meadows and wet meadows adjacent to these habitats. This species is semi-terrestrial and individuals may spend a good deal of time on land. They often move between a variety of wetland types during the active season, which can extend from early March to mid-October. They overwinter in standing water that is typically more than 3 feet in deep and with a deep organic substrate but will also use both warm and cold-water streams and rivers where they can avoid freezing. Blanding's generally breed in spring, late summer or fall. Nesting occurs from about mid-May through June depending on spring temperatures. They strongly prefer to nest in sandy soils and may travel well over a mile to find suitable soils. This species appear to display nest site fidelity, returning to its natal site and then nesting in a similar location annually. Hatching occurs from early August through early September but hatchlings can successfully overwinter in the nest, emerging the following late April or May. This species takes 17 to 20 years or more to reach maturity.

The northern cricket frog is listed as an endangered species in Wisconsin, prefer ponds, lakes, and a variety of habitats along and adjacent to streams and rivers including, marshes, fens, sedge meadows, low prairies, and exposed mud flats. The species tends to breed in quite water (no or low flow) and may also move from streams and rivers to adjacent wetlands and ponds. Cricket frogs cannot tolerate freezing or complete inundation for more than 24 hours during the winter and seek a variety of microhabitats that provide suitable overwintering conditions, including crayfish burrows, small mammal burrows, rotted-out root channels, seepage areas where groundwater flow prevents freezing at the surface or spaces created by sloughing streambanks. Cricket frogs are active from late-March through November. Breeding occurs from mid-May through mid-August, with some larvae not transforming until late September.

The ornate box turtle is listed as an endangered species in Wisconsin, prefer dry sand prairies, oak savannas with sandy soils and in sandy open oak woods. They overwinter in deep sand in open canopy habitat in microhabitats supporting sparse vegetation and in areas of disturbed soils such as the edges of sand blows. Ornates are active from late-March or early April through mid-October. Breeding primarily occurs in August but can happen throughout the active season. Nesting occurs from late-May through early July and hatching occurs in August or early September. Hatchlings may remain in nests and emerge the following spring.

Jeopardy Assessment

This project provides long-term habitat improvement; provides critical habitat for rare, threatened and endangered species; provides increased stability (permanent cover) in an environmentally sensitive, flood-

prone area and does not negatively impact existing wetlands. Breaching berm(s) will reconnect the Sugar River to its historic floodplain and internal ditch filling and tile breaking will promote suitable wetland habitat for local species. The short-term disruption incurred on this site will be minimized as disturbance will primarily be limited to existing cropland areas, artificial drainage ditches, and artificial berms. As a result, we anticipate that take of the turtles and frogs will be low. The department has determined that the proposed project is not likely to jeopardize the continued existence or recovery of the state population of these animals or the whole plant-animal community of which they are a part. The benefits to public safety justify this activity. The basis for this assessment is that large benefit to the species and natural communities in the area (and large gain of natural habitat) far outweighs the small amount of temporary disturbance associated with this project.

Conservation Measures

A summary of conservation measures are found below, for more specific information please refer to the Avon Bottoms Incidental Take Conservation Plan.

- Avoidance of the natural Sedge Meadow habitat.
- A large amount of native grasses will be planted throughout the course of the project.
- Cricket frog mitigation will include creating scrapes in the upland open canopy area. These scrapes will provide suitable breeding habitat.
- Tilling for tree and seed planting will be done by May 20th. Tree planting will be done prior to May 20th. This will prevent impacts to the Blanding's turtle that will start nesting in the existing croplands after May 20th. This species is semi-terrestrial and individuals may move into the cropland habitat. Nesting occurs from about mid-May through June depending on spring temperatures. They strongly prefer to nest in sandy soils and may travel well over a mile to find suitable soils.
- Seeding will occur after May 20th (tilling prior) and will be done by air or broadcast seeder. Follow-up to the seed planting will involve running a rack over the field to assist seed germination. The seeding and racking will only occur between 10:00am and 5:00pm as to avoid likely times a female turtle will be present and laying her eggs.
- Mowing will be limited to four times a year when vegetation is approximately 18 inches tall. Mowing height will be 8 inches and above. The mower being used will not create suction as to not pull up turtles, nesting birds, or other wildlife. Both the prairie and tree planting area will be mowed using this regime. Mowing should be conducted when temperatures are less than 55°F (turtles are less active during this time and likely to be in the water rather than on land).
- Blanding's turtle removal will be conducted by a qualified biologist in the ditches prior to filling activities. Removed turtles will be placed outside the project area in suitable turtle habitat.